

ABSTRACT OF THE DISCLOSURE

A nozzle 21 is arranged in an ink pan 11 containing ink I, and air A is discharged from an opening 21A of the nozzle 21 into ink I. Back pressure P1 in the nozzle 21 is detected by a sensor 25, and by detecting changes in the back pressure P1, a liquid level is detected. The opening 21A of the nozzle 21 is opened in a direction inclined with respect to the axial direction of the nozzle 21, and by holding the nozzle 21 generally vertically, the opening 21A is set in a way of being inclined with respect to the liquid level L.